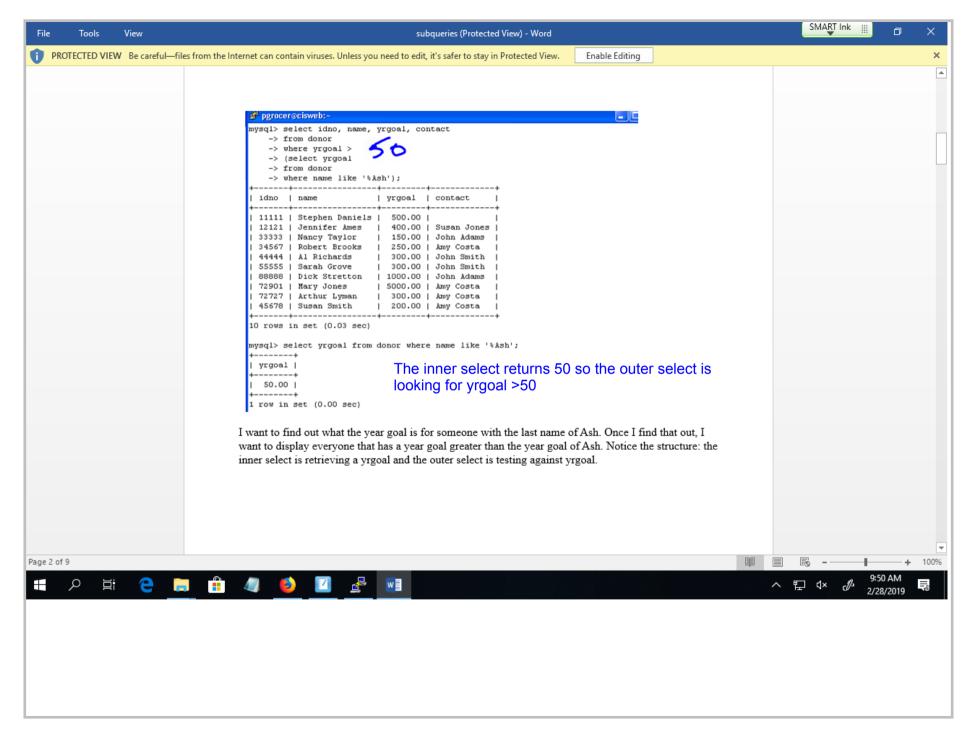
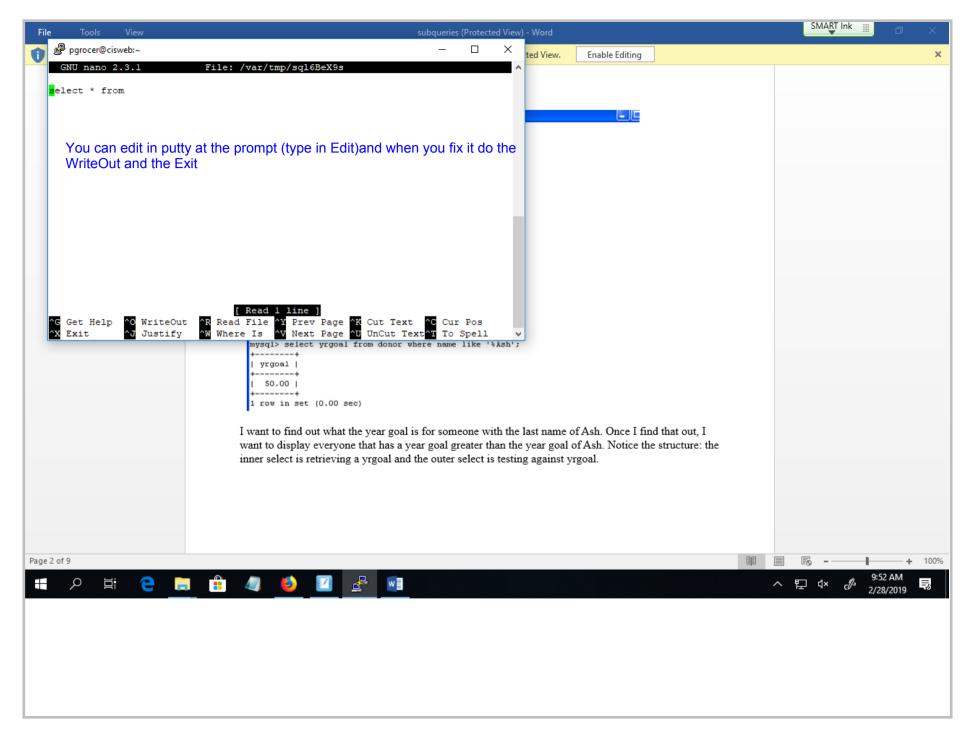


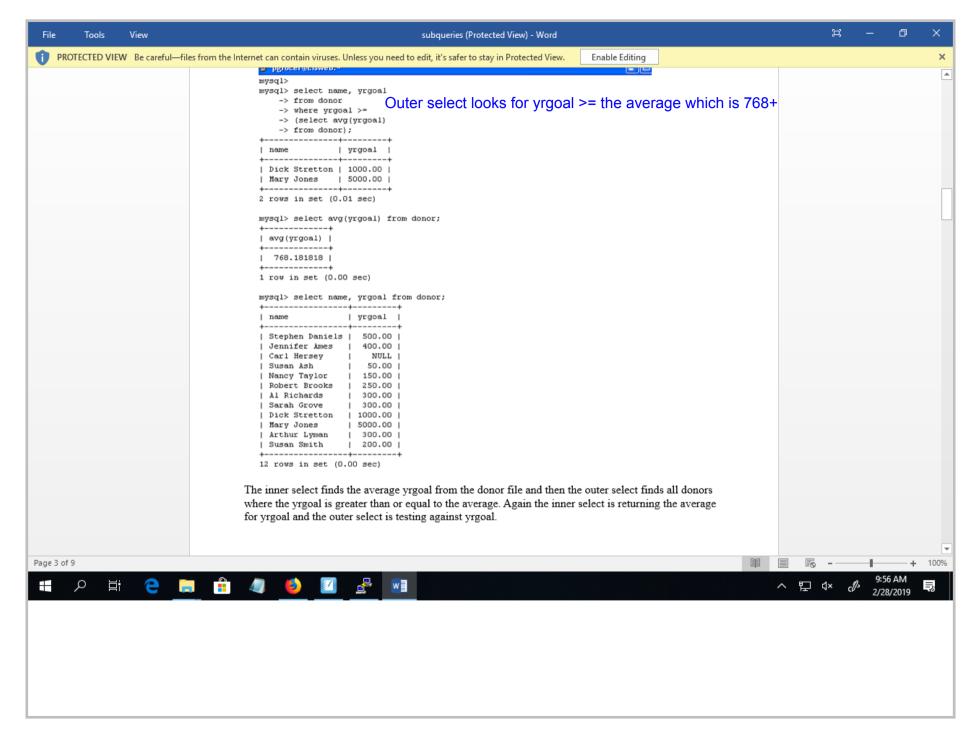
Title: Feb 28-9:33 AM (1 of 24)



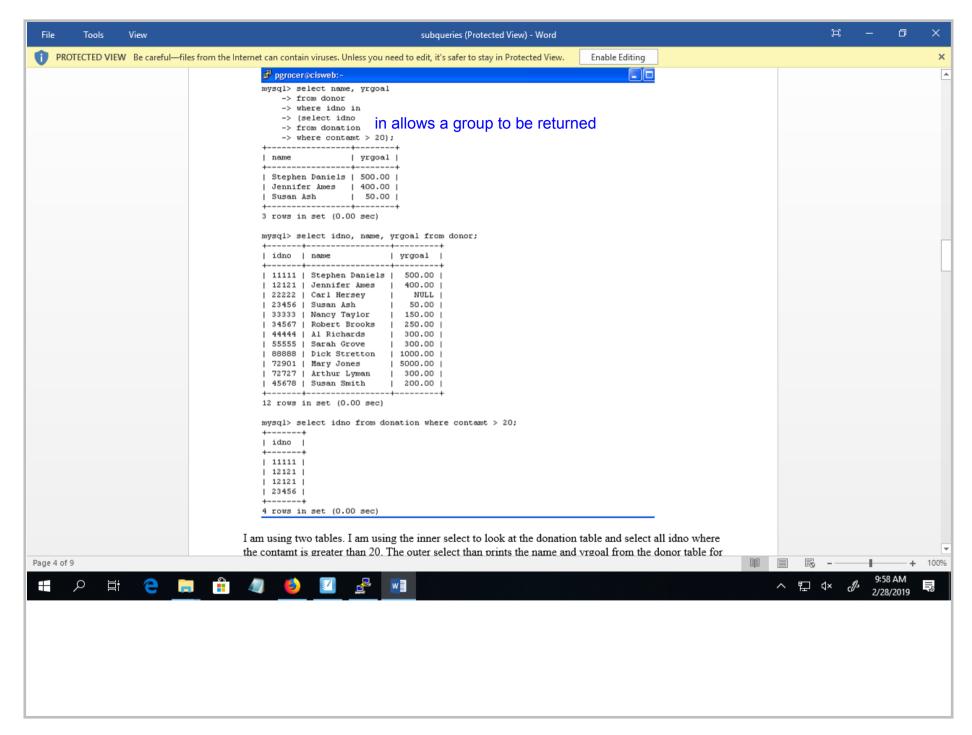
Title: Feb 28-9:50 AM (2 of 24)



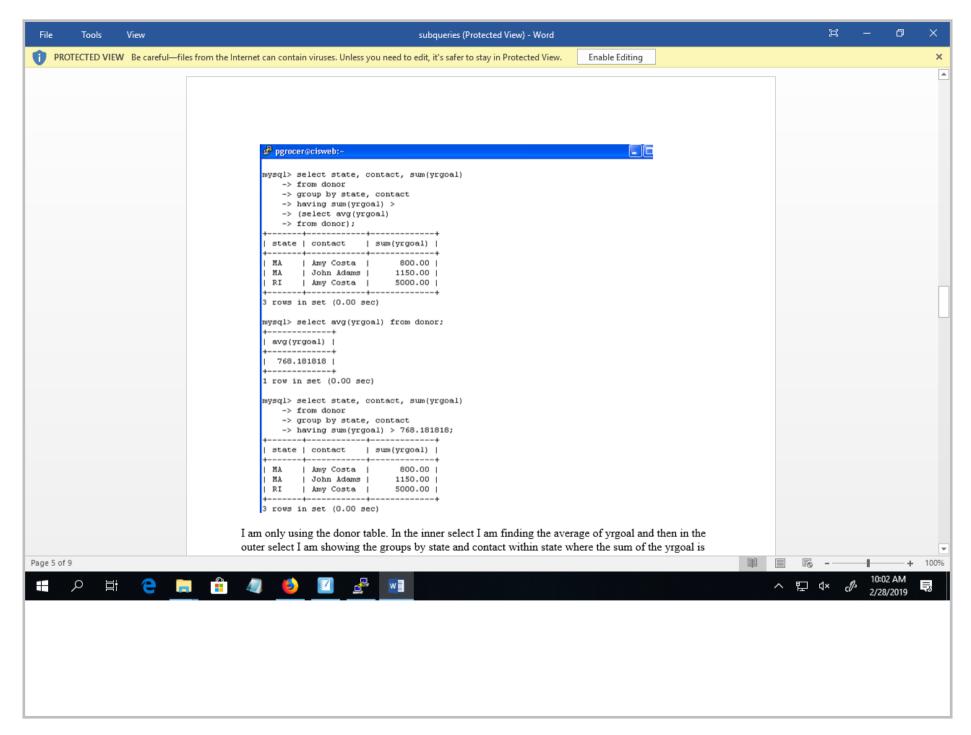
Title: Feb 28-9:52 AM (3 of 24)



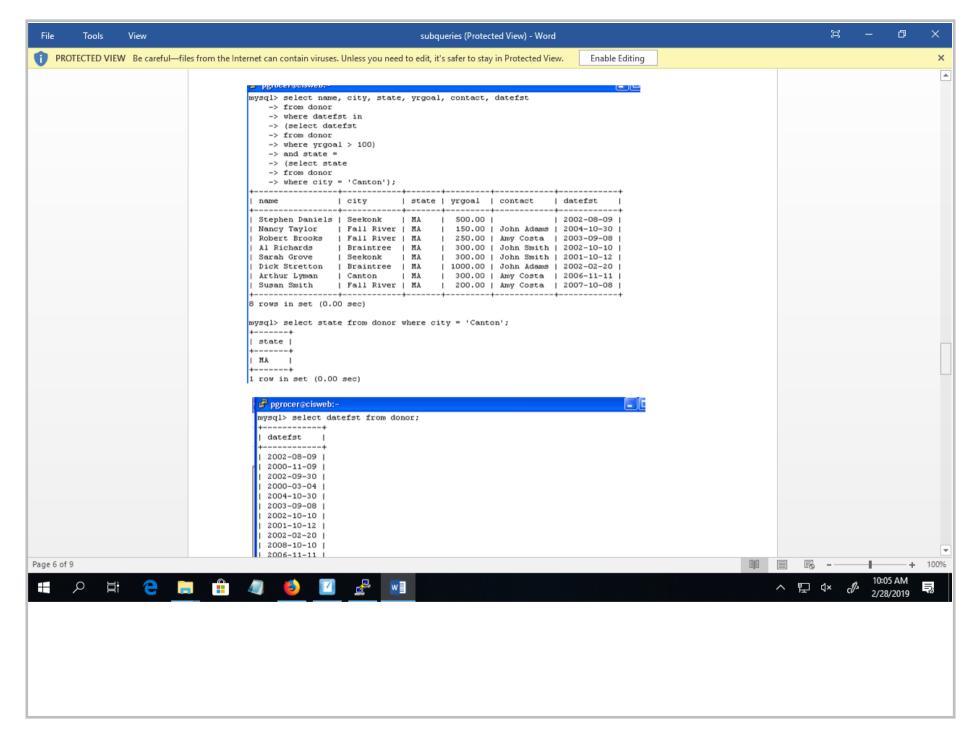
Title: Feb 28-9:56 AM (4 of 24)



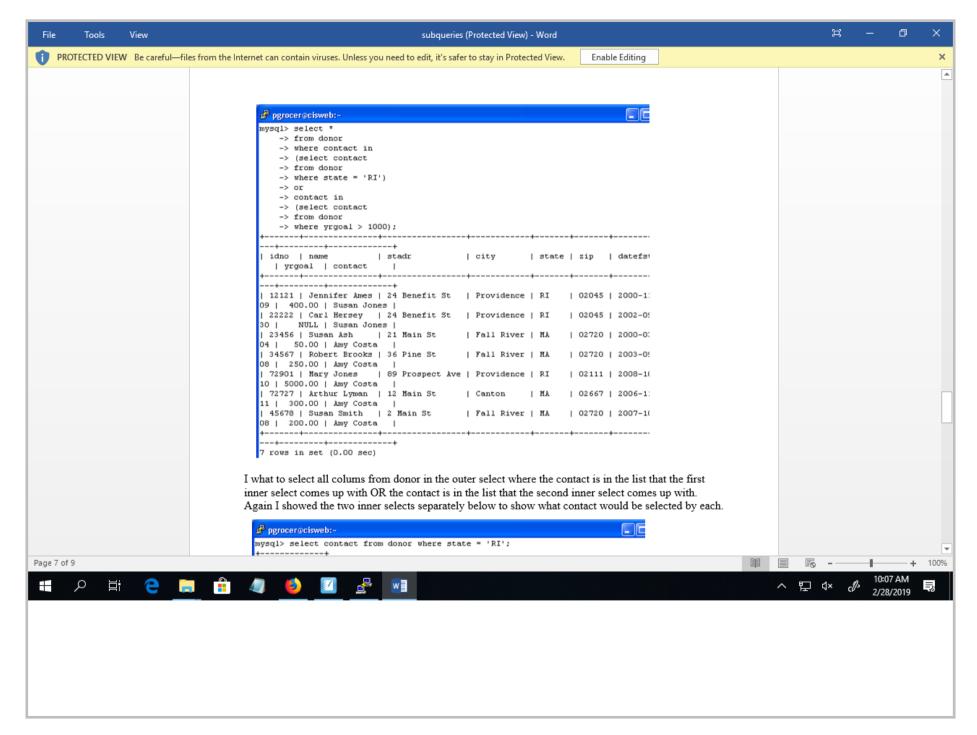
Title: Feb 28-9:58 AM (5 of 24)



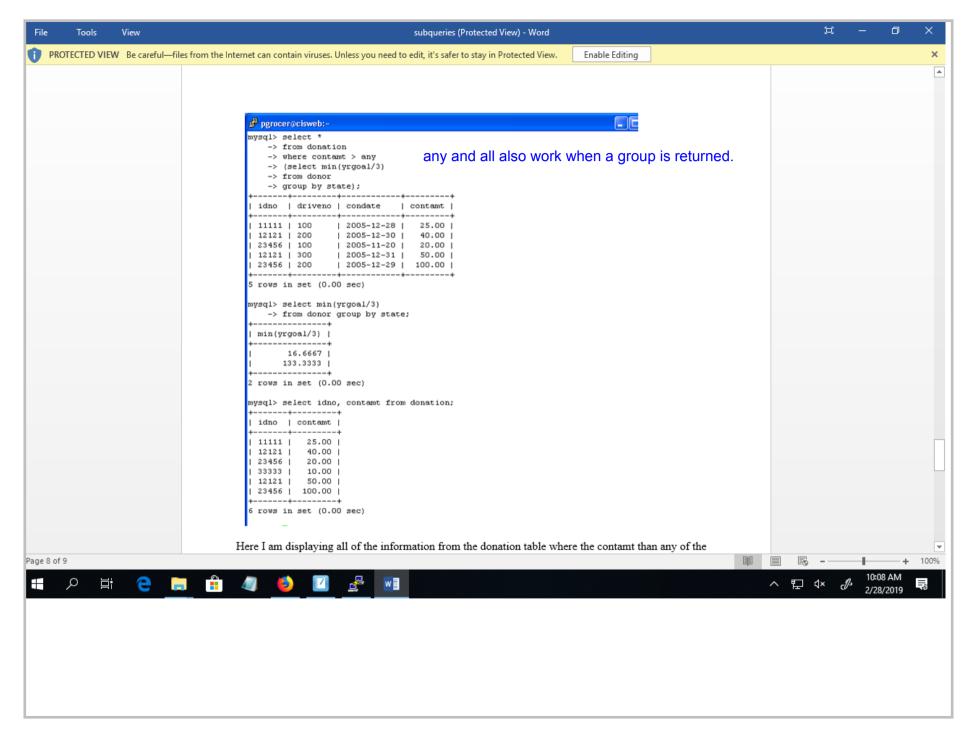
Title: Feb 28-10:02 AM (6 of 24)



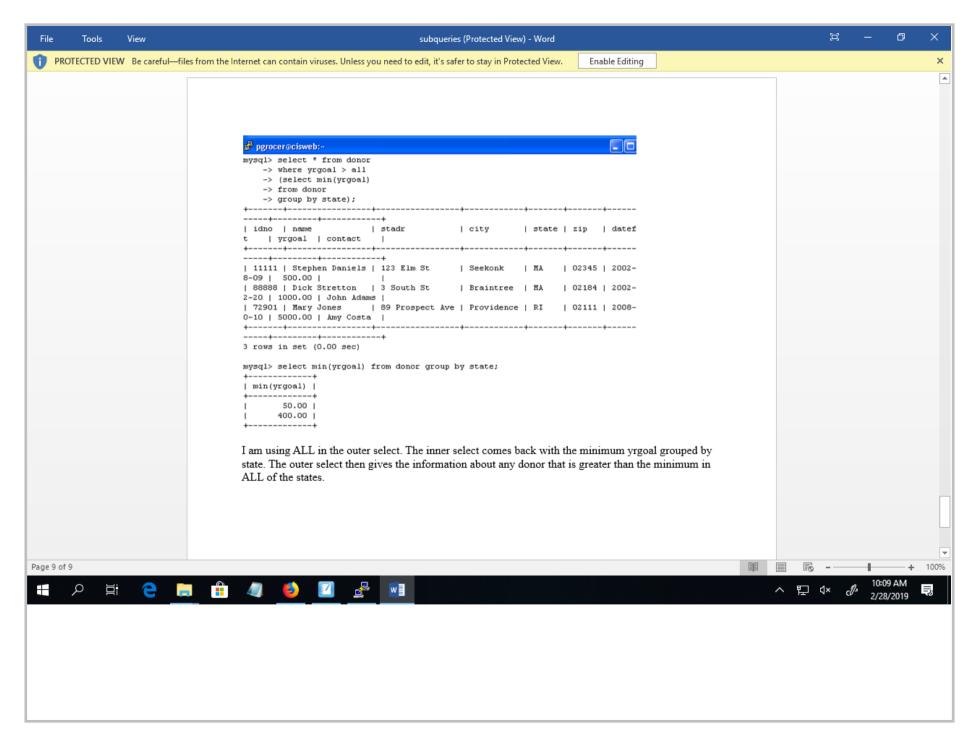
Title: Feb 28-10:05 AM (7 of 24)



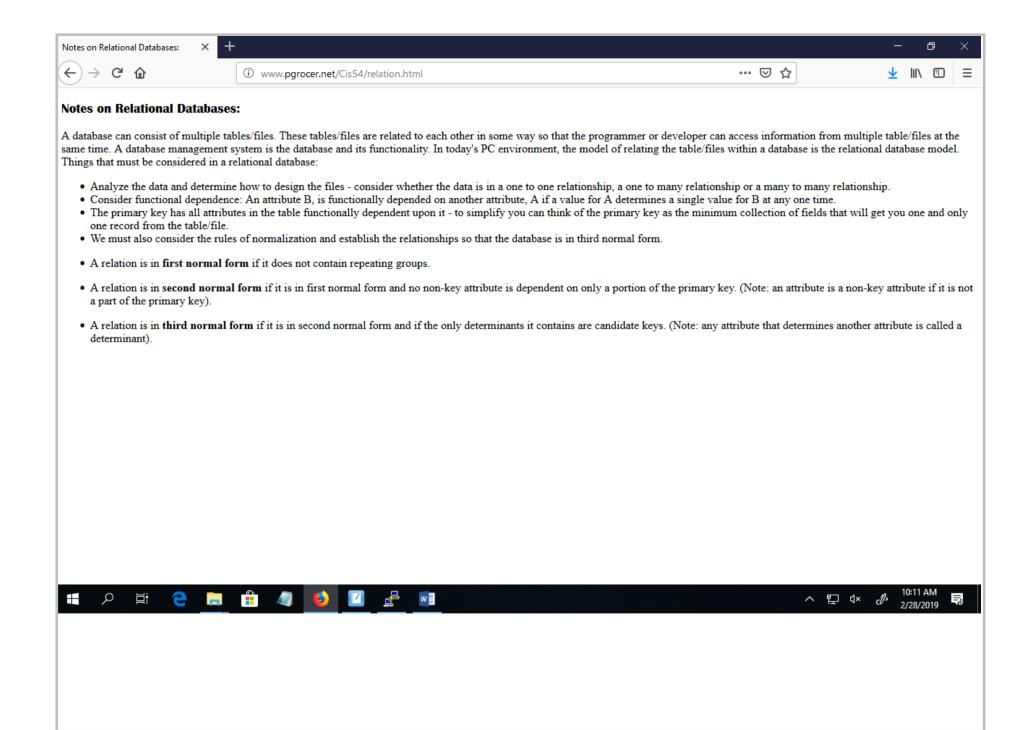
Title: Feb 28-10:07 AM (8 of 24)



Title: Feb 28-10:08 AM (9 of 24)



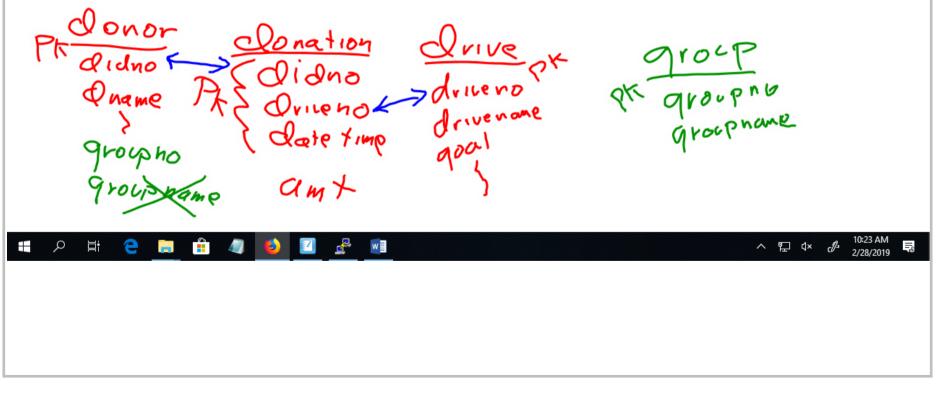
Title: Feb 28-10:09 AM (10 of 24)

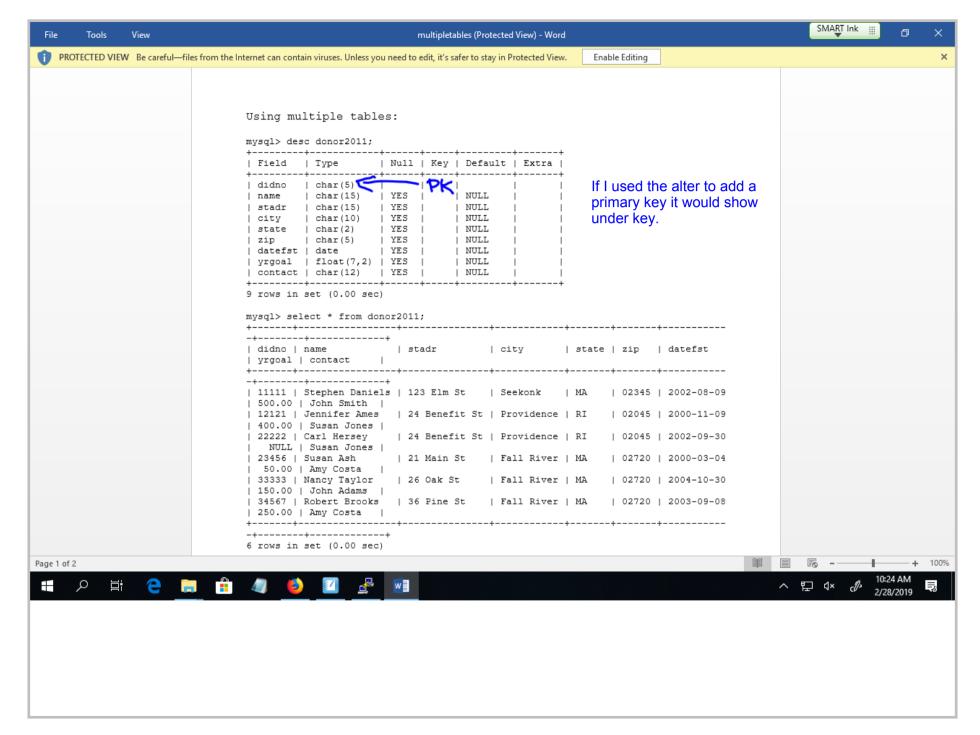




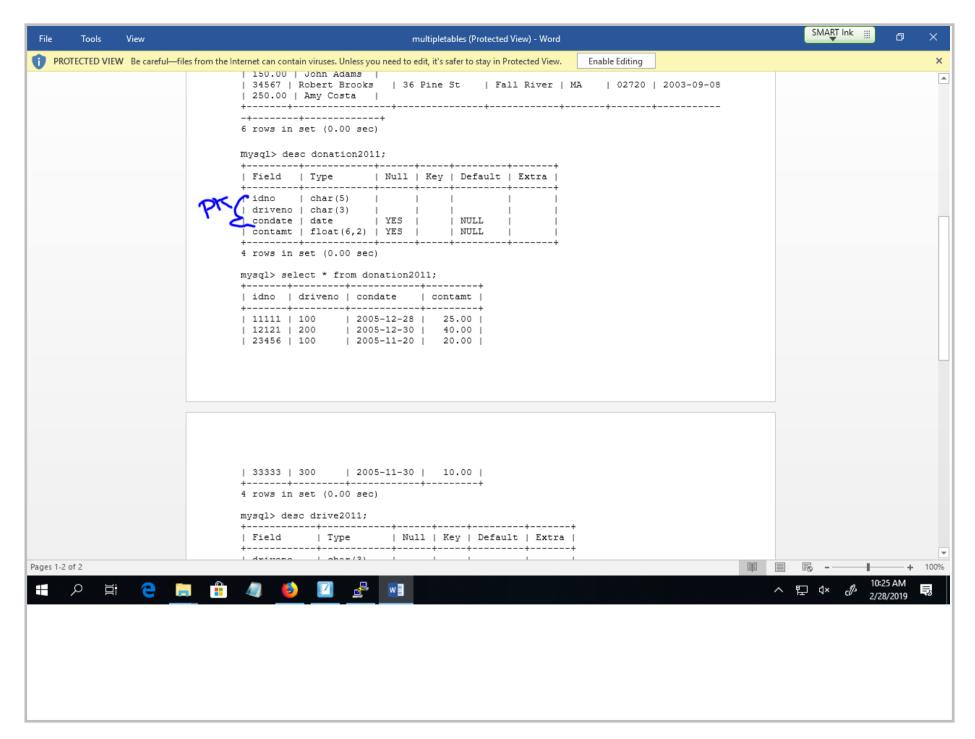
A database can consist of multiple tables/files. These tables/files are related to each other in some way so that the programmer or developer can access information from multiple table/files at the same time. A database management system is the database and its functionality. In today's PC environment, the model of relating the table/files within a database is the relational database model. Things that must be considered in a relational database:

- Analyze the data and determine how to design the files consider whether the data is in a one to one relationship, a one to many relationship or a many to many relationship.
- Consider functional dependence: An attribute B, is functionally depended on another attribute, A if a value for A determines a single value for B at any one time.
- The primary key has all attributes in the table functionally dependent upon it to simplify you can think of the primary key as the minimum collection of fields that will get you one and only one record from the table/file.
- We must also consider the rules of normalization and establish the relationships so that the database is in third normal form.
- A relation is in first normal form if it does not contain repeating groups.
- A relation is in second normal form if it is in first normal form and no non-key attribute is dependent on only a portion of the primary key. (Note: an attribute is a non-key attribute if it is not a part of the primary key).
- A relation is in **third normal form** if it is in second normal form and if the only determinants it contains are candidate keys. (Note: any attribute that determines another attribute is called a determinant).

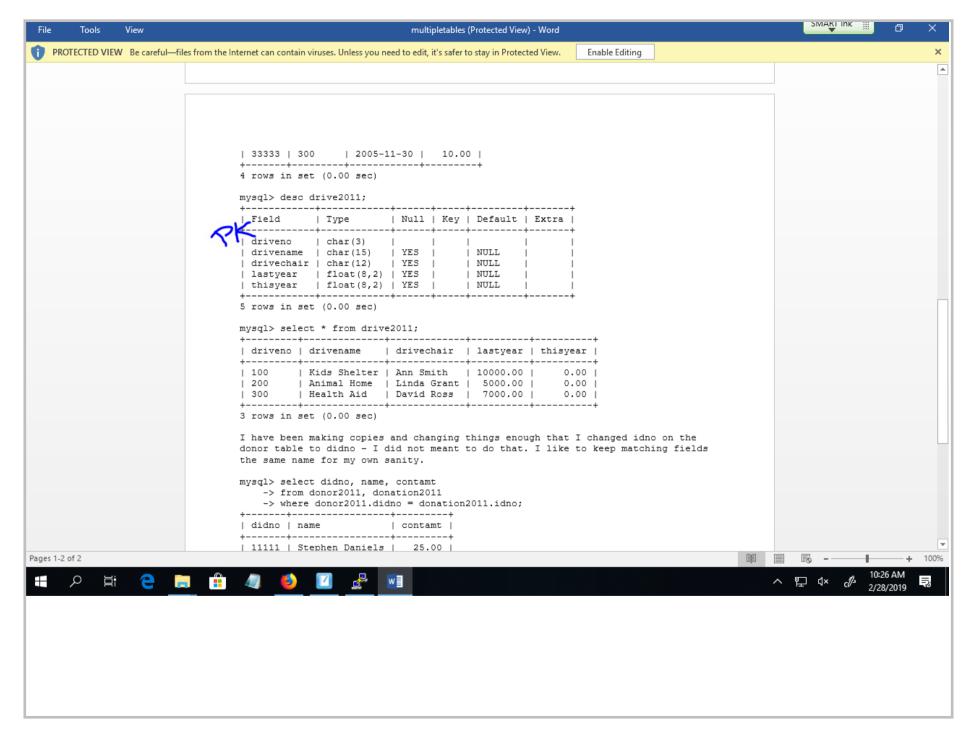




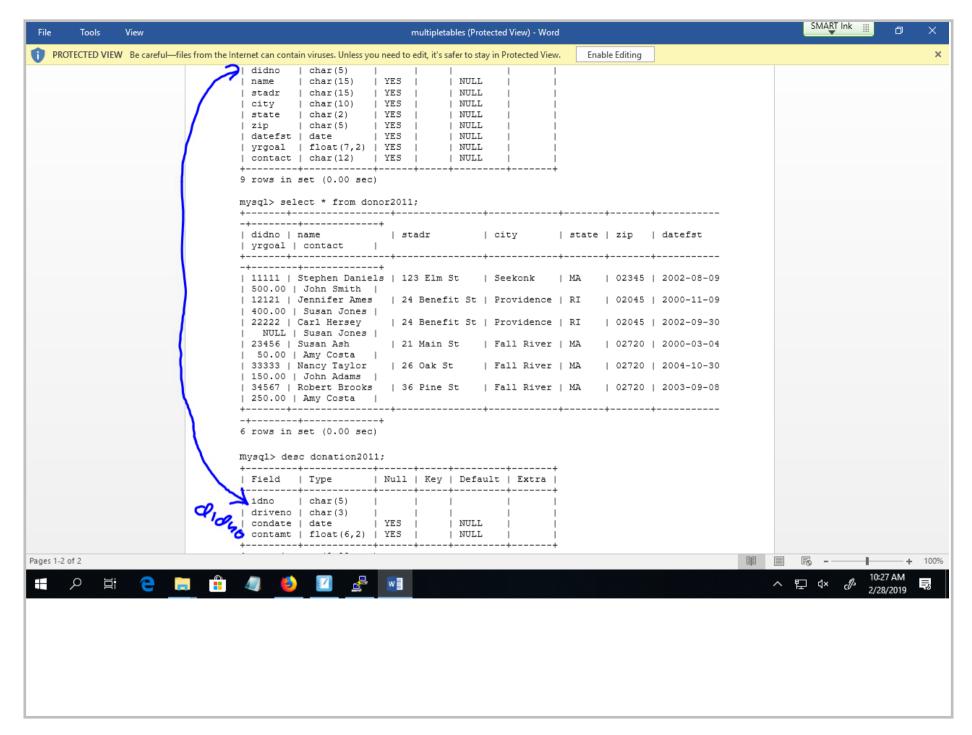
Title: Feb 28-10:24 AM (13 of 24)



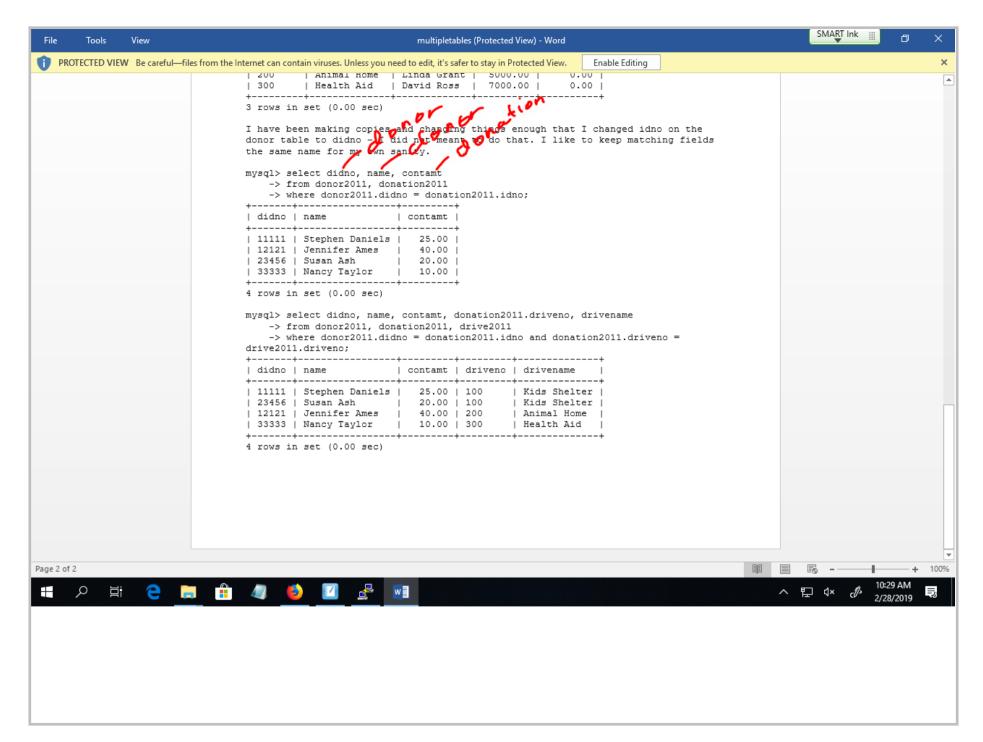
Title: Feb 28-10:25 AM (14 of 24)



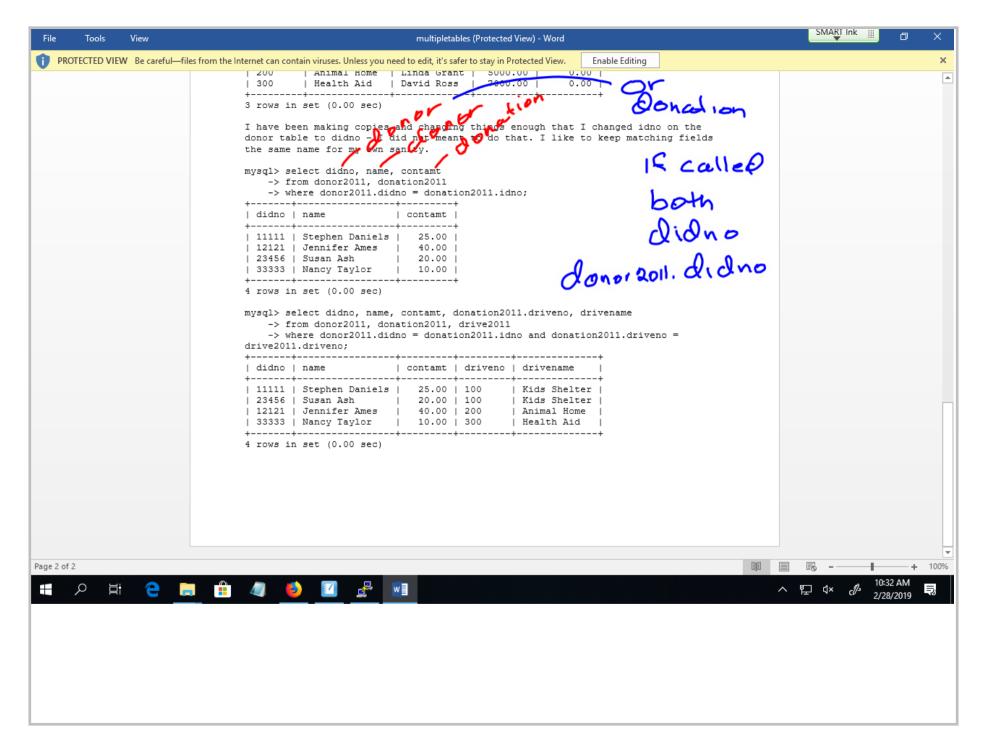
Title: Feb 28-10:26 AM (15 of 24)



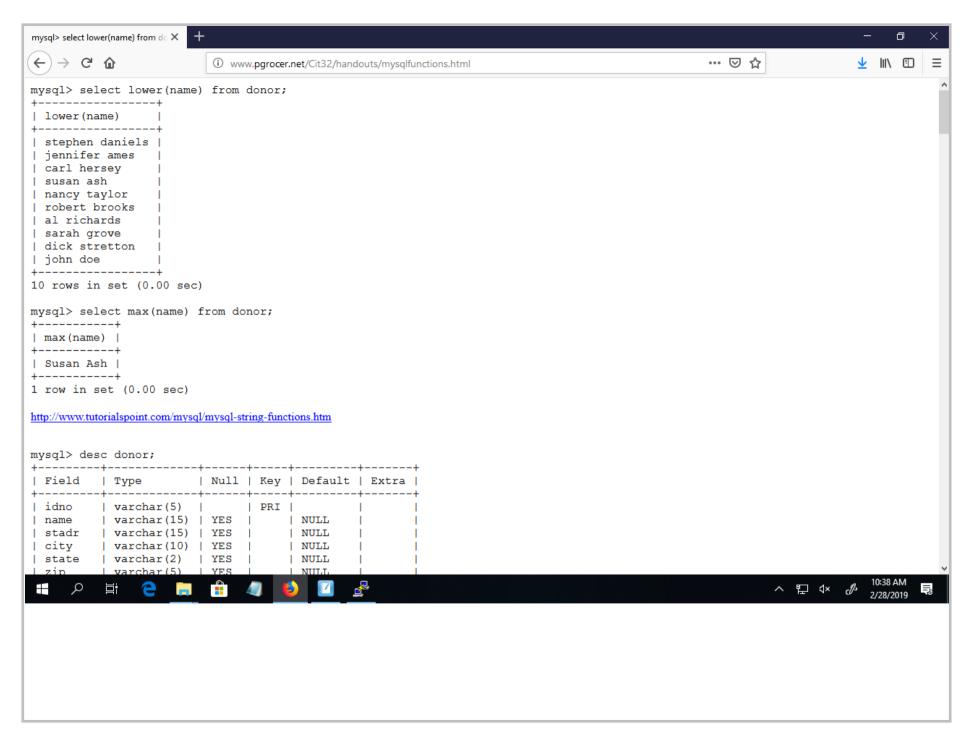
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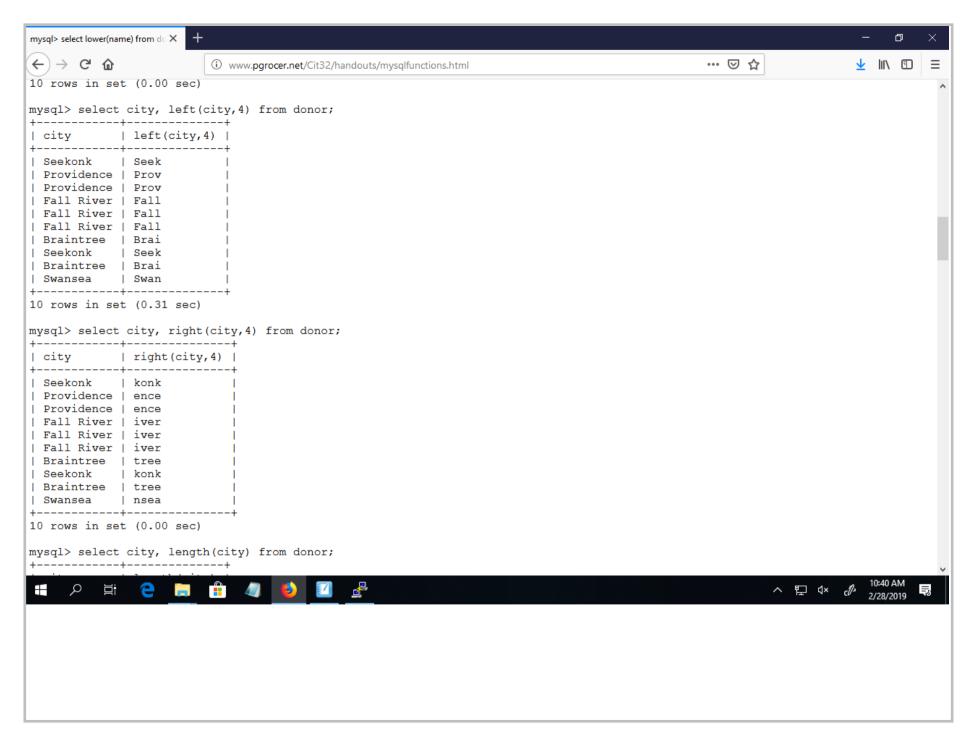
Title: Feb 28-10:29 AM (17 of 24)



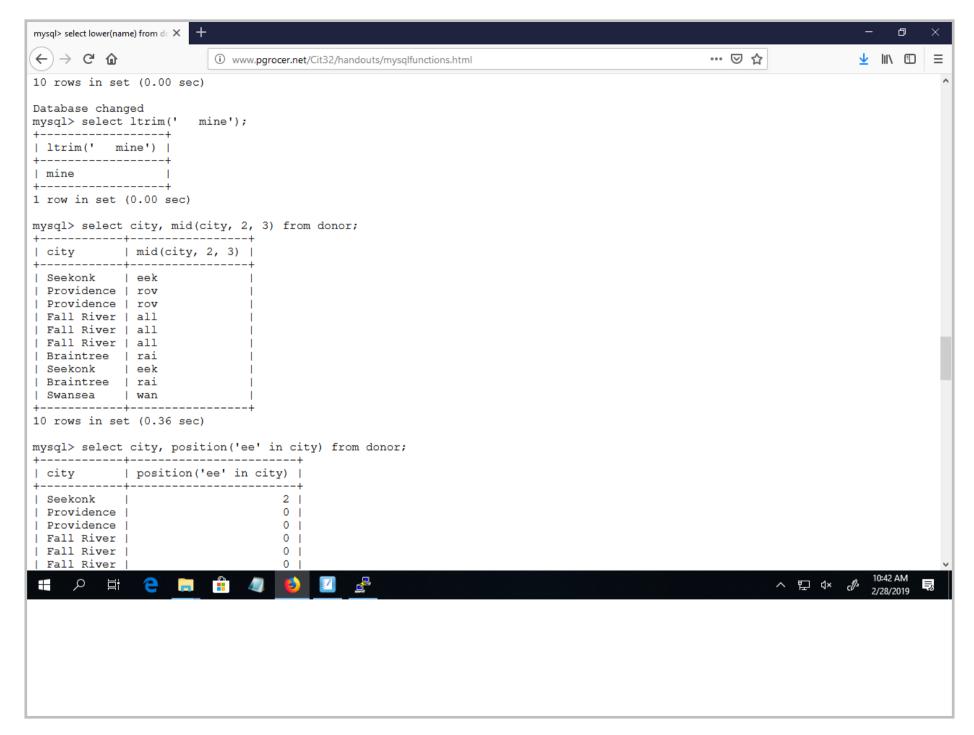
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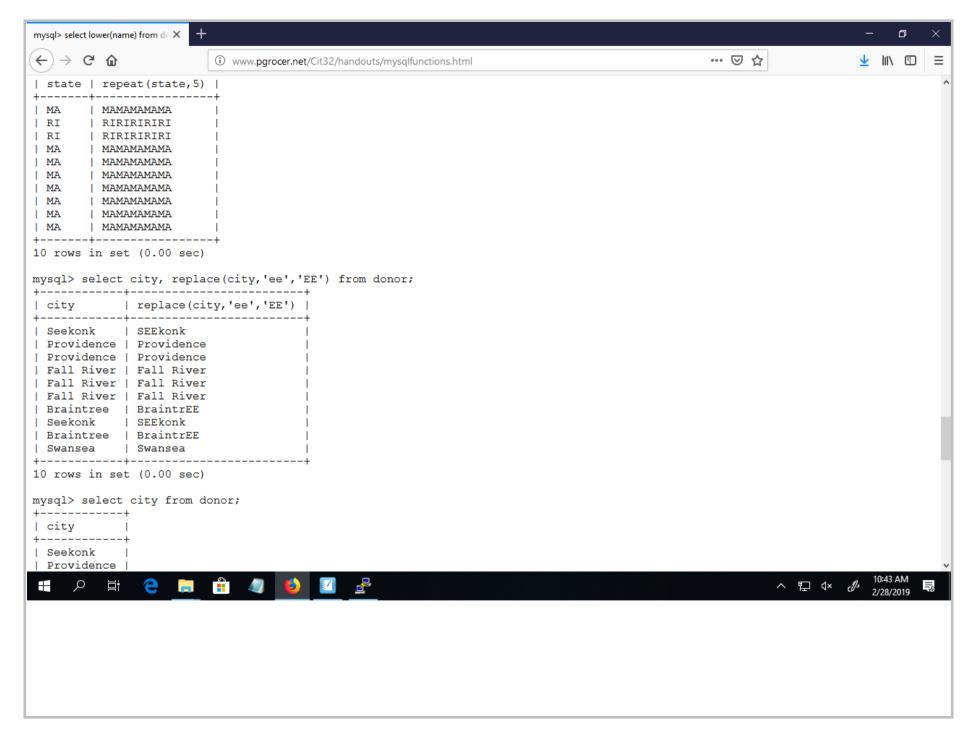
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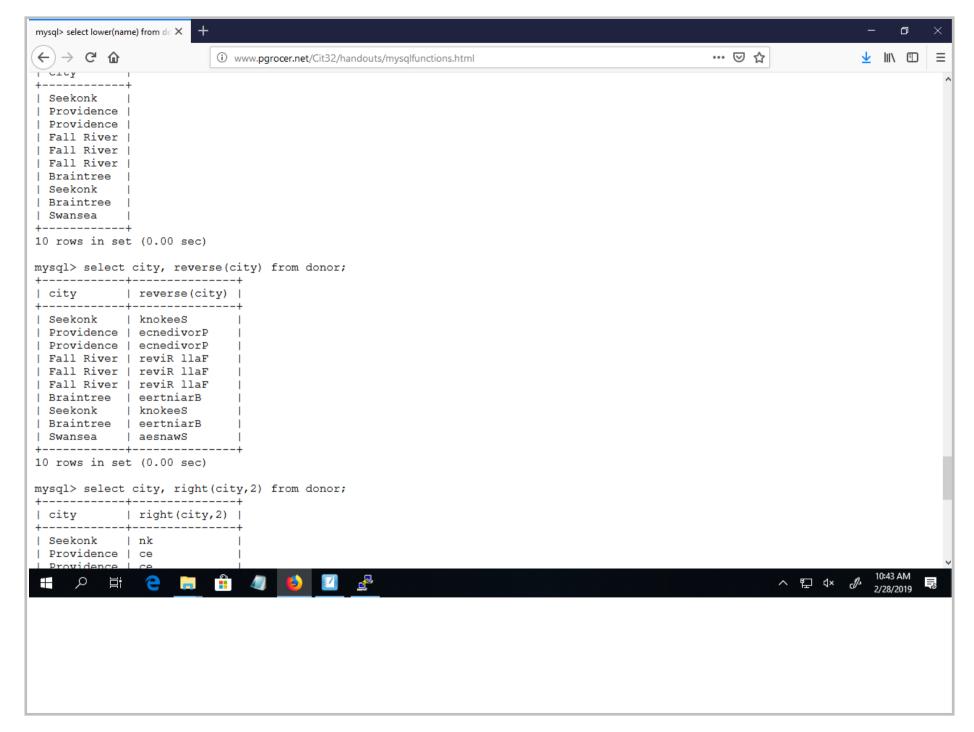
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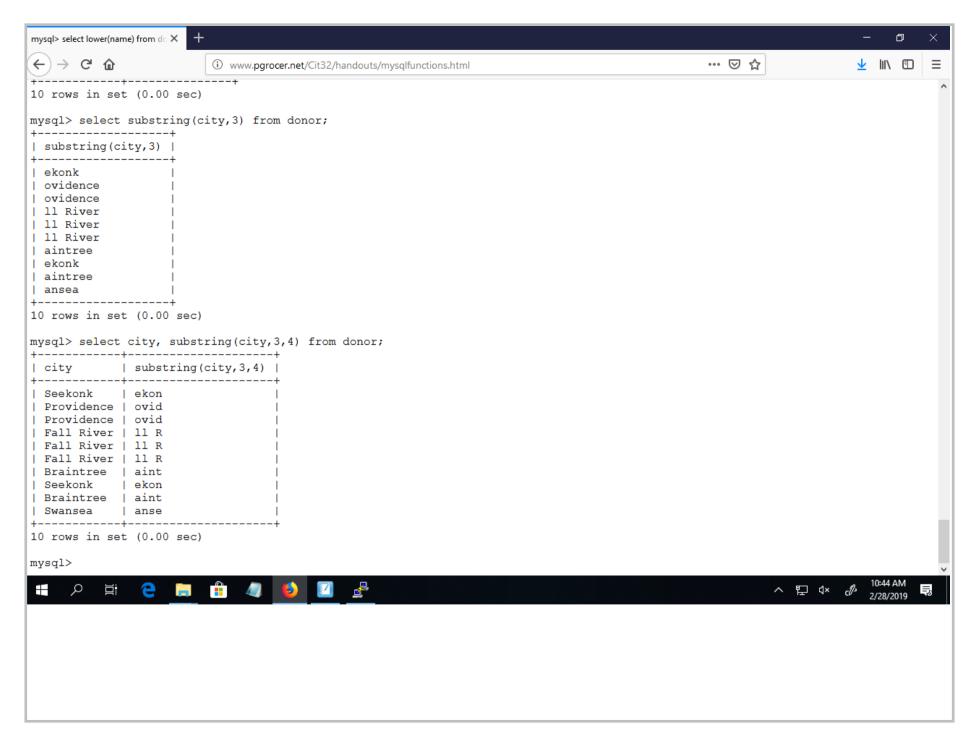
Title: Feb 28-10:42 AM (21 of 24)



Title: Feb 28-10:43 AM (22 of 24)



Title: Feb 28-10:43 AM (23 of 24)



Title: Feb 28-10:44 AM (24 of 24)